

Chapter 5 CRT Questions

1. The purpose of a loop is to repeat lines of code until a certain condition or statement is satisfied.
2. A Do-While loop performs an action and then checks to see if the condition is met, but a While loop checks to see if the condition is met, and then performs an action.
3. Guessing Game Part A Mastery
4.
 - a) An infinite loop is a loop that continues without end.
 - b) The loop can be infinite if the condition is always true. It can also be caused by a syntax error, which is normally due to a missing semicolon “ ; ” at the end of the statement.
 - c) Overflow occurs when the value exceeds the limit defined in the code.
5. 60 Times
6. All values under 120
7. Accumulators get the sum/total of all the numbers, while a counter tallies the number of values.
8.

```
for (int i = 2; i <= 10; i++) {  
    int total = i;  
    System.out.println(total);  
}
```
9. Choosing the correct loop structure should be based on if you want the program to run until a certain condition is met, or if you want the loop to repeat a specific number of times.